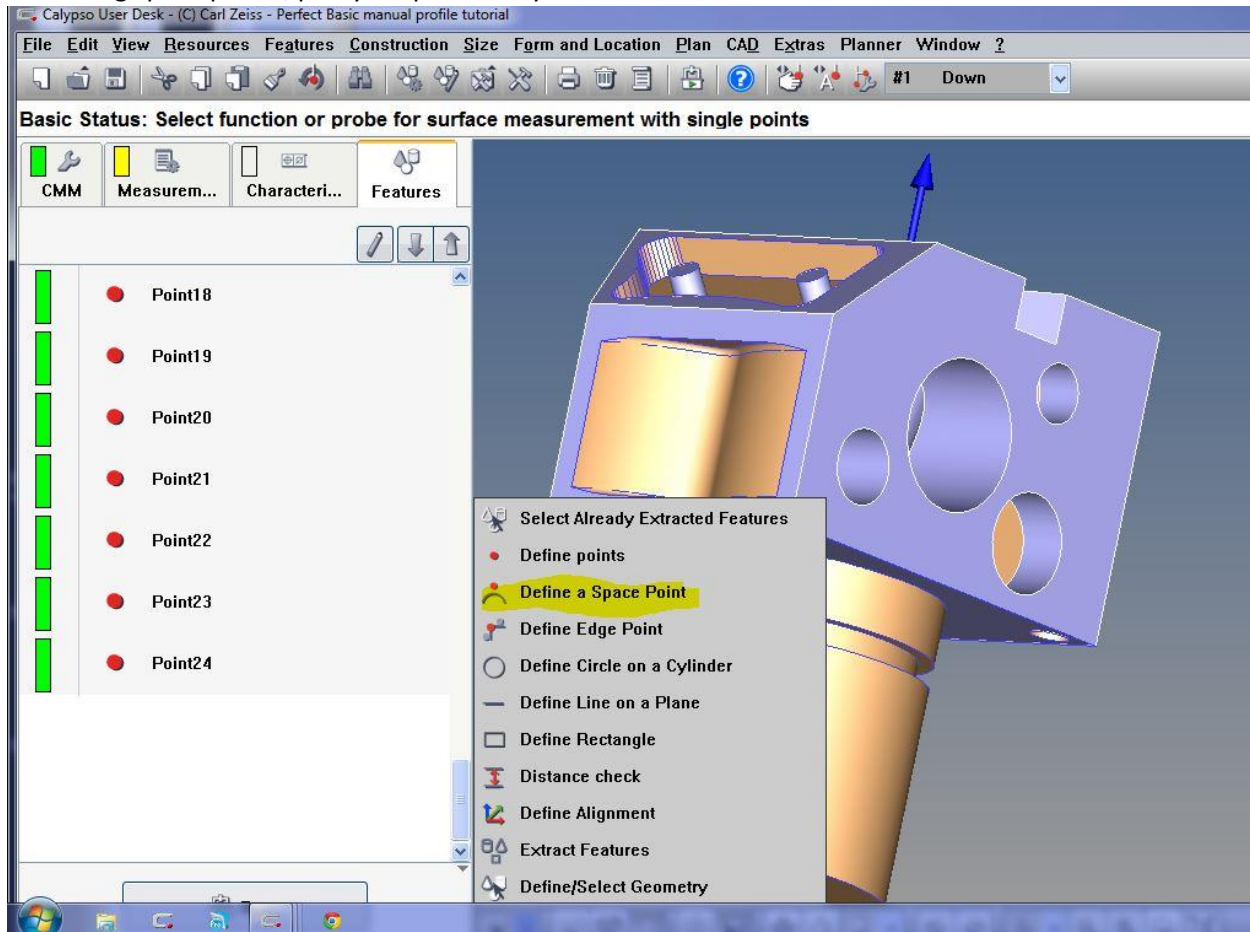
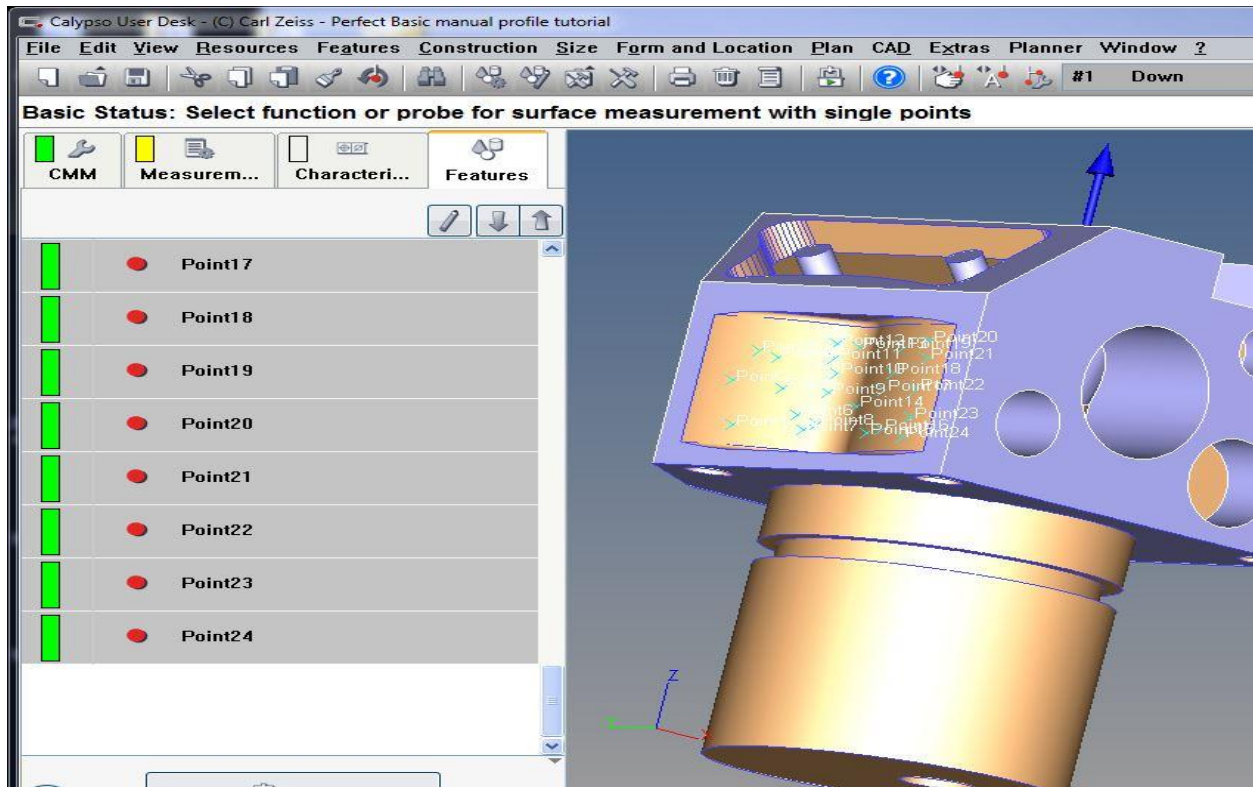


## How do I make a profile of a surface without using Freeform? – By Andrea Kerschl and Jim York

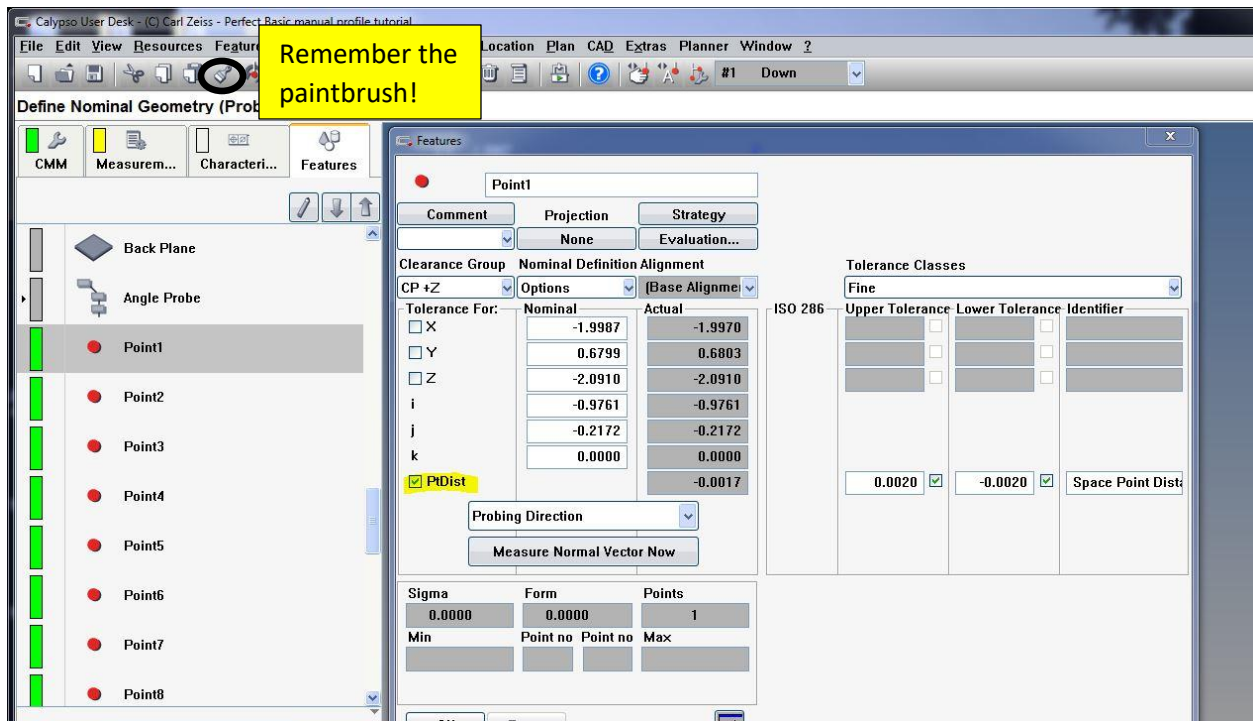
**RULE: If you plan on using this method because your Calypso does not support Freeform or Curve. This method will ONLY work if you have a full reference frame for your profile. (ie A B and C) This will not work otherwise.**

First using space points, plot your points on your curved surface.



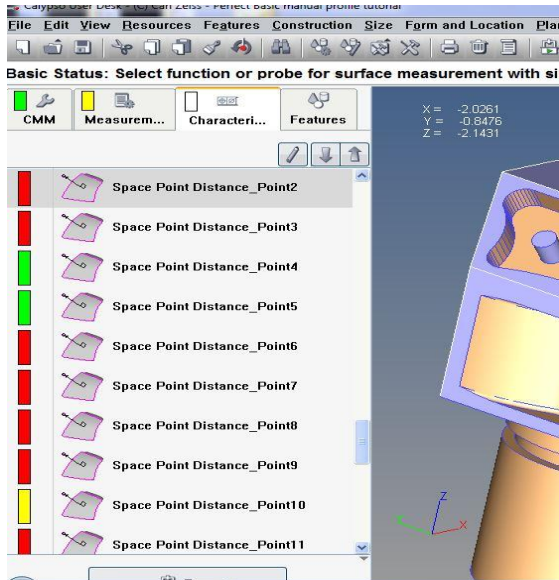


Now you need to put distances on each space point. To do this open up each point and check off "pt dist"

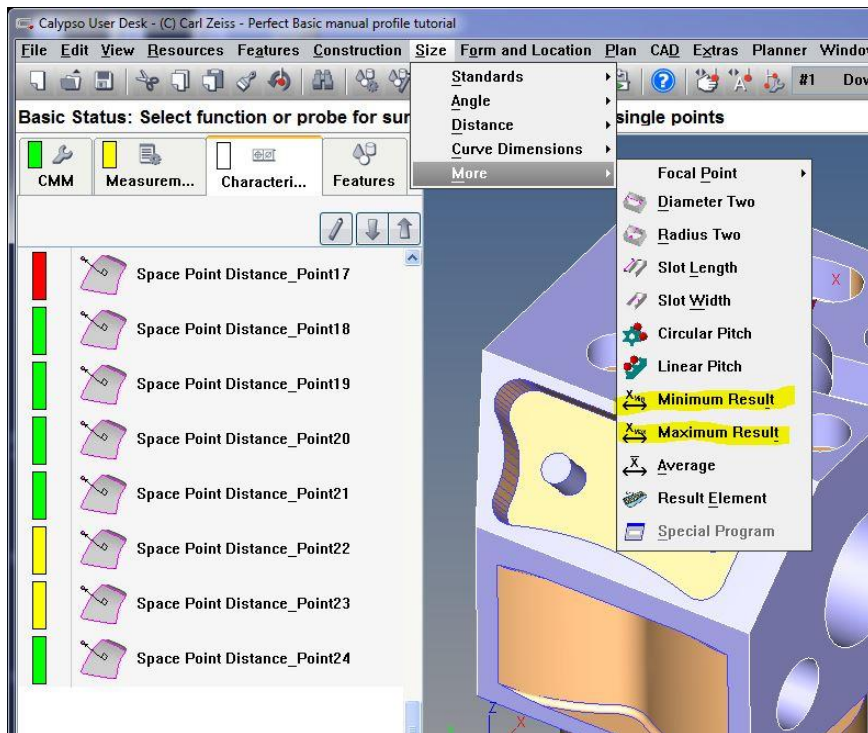


Yes you must do this for each point. Remember the Paintbrush command can do this for you for each point.

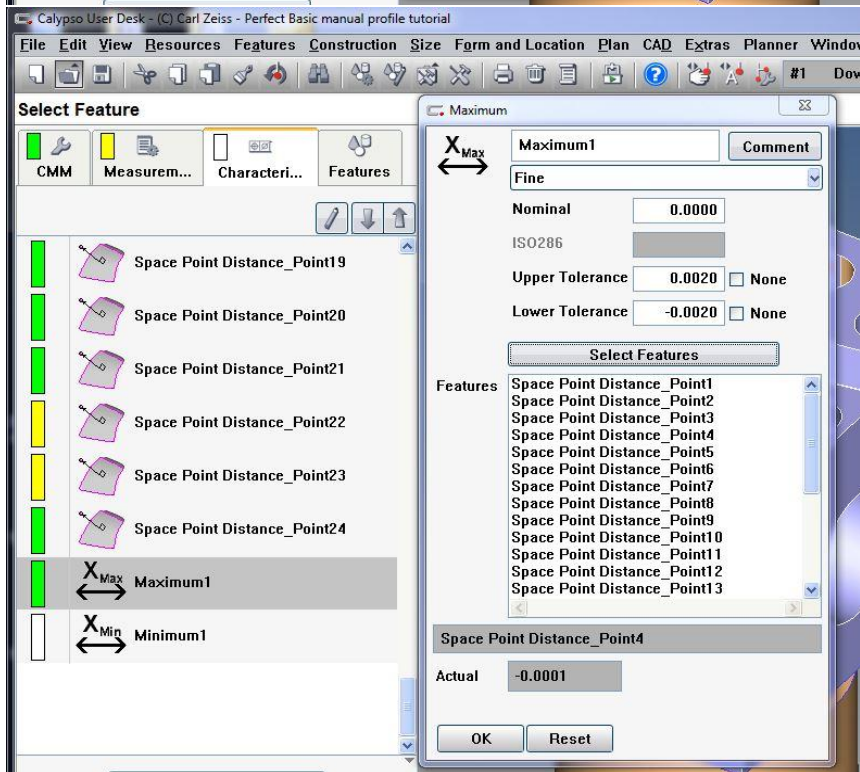
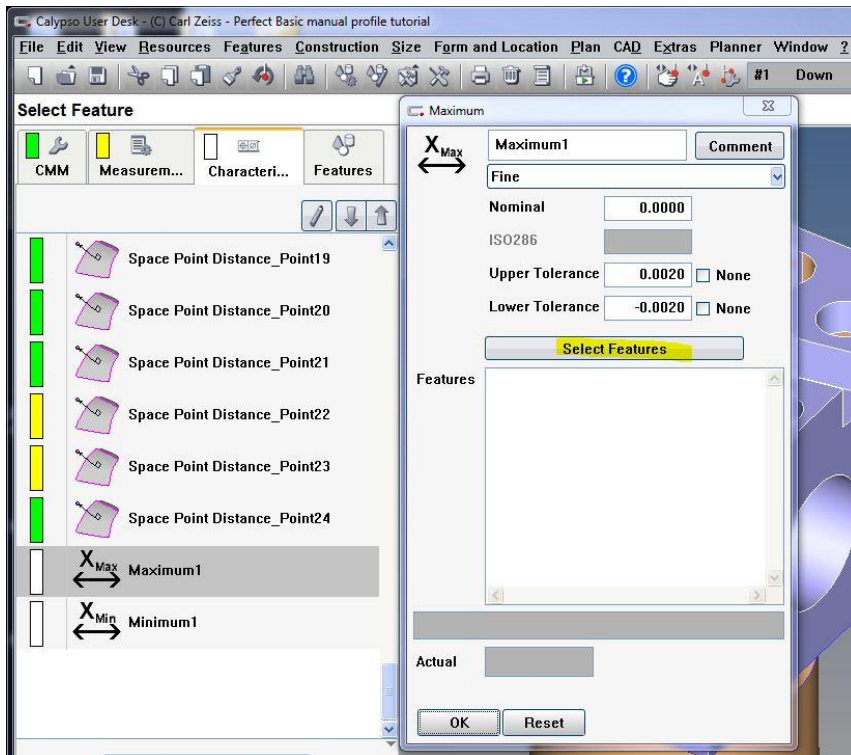
Now your screen should look something like this.

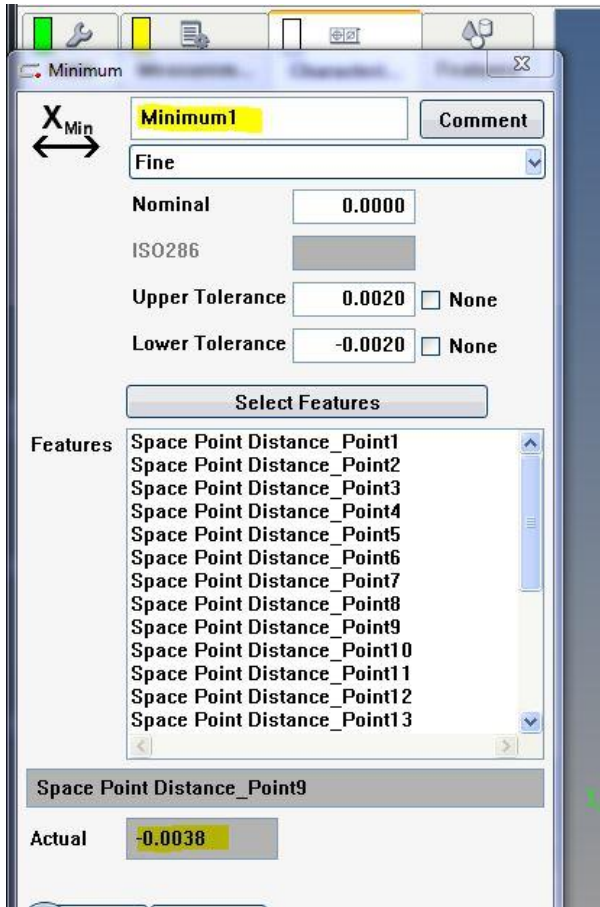


Now we need to find the max point and min points for calculation. To do this, select “Size” “More” “Minimum feature” and “Maximum feature”

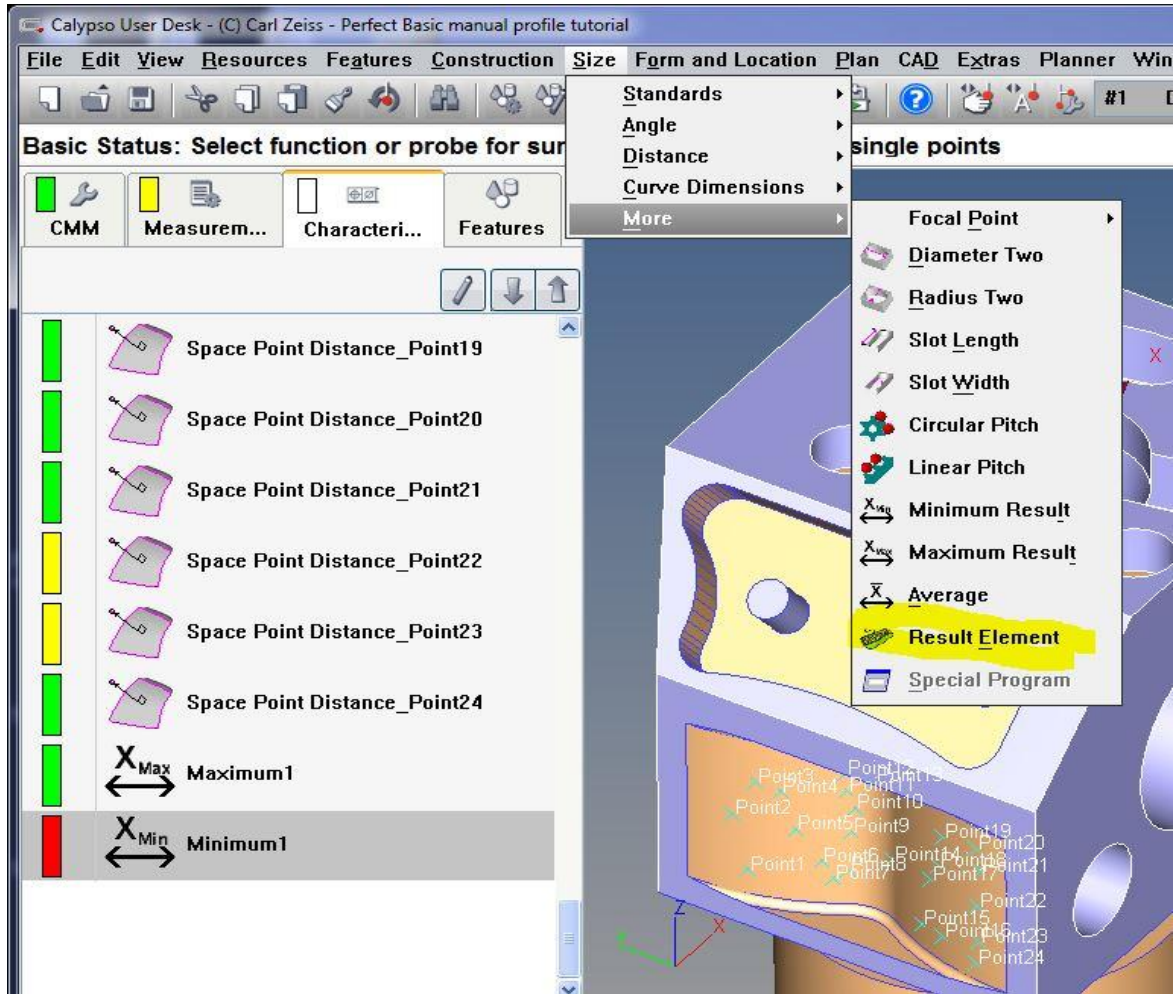


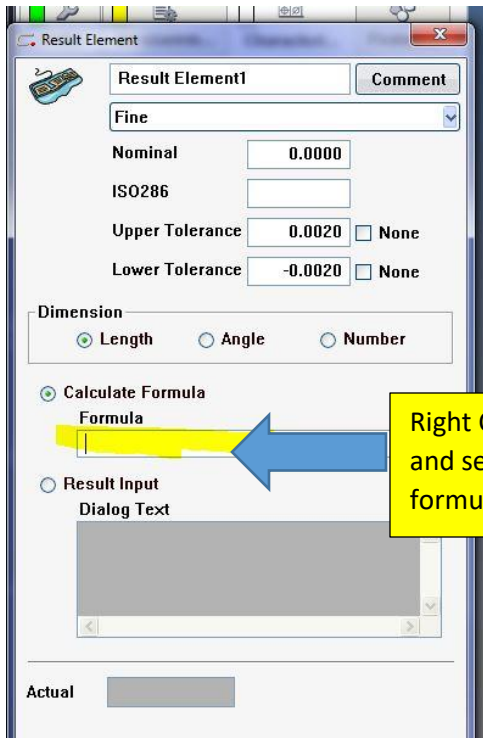
Open up Maximum Result first and select the “Features” tab, then highlight all your points and click okay. Do the same for your minimum result. You’ll notice that the minimum has a negative value. We will take an extra step after we make those.



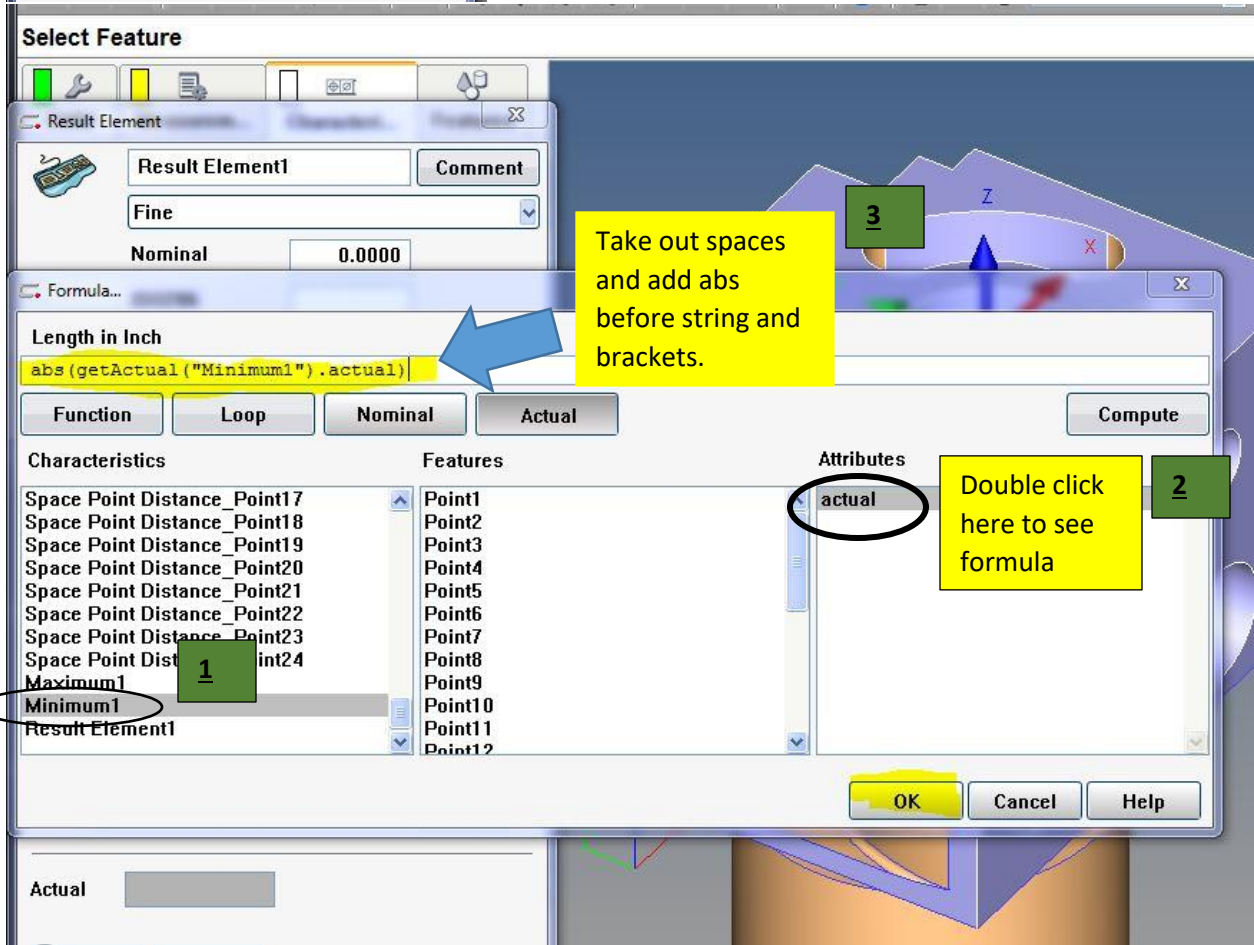


Now we need to turn this into a positive value. To do that we can use a result element to get the absolute.





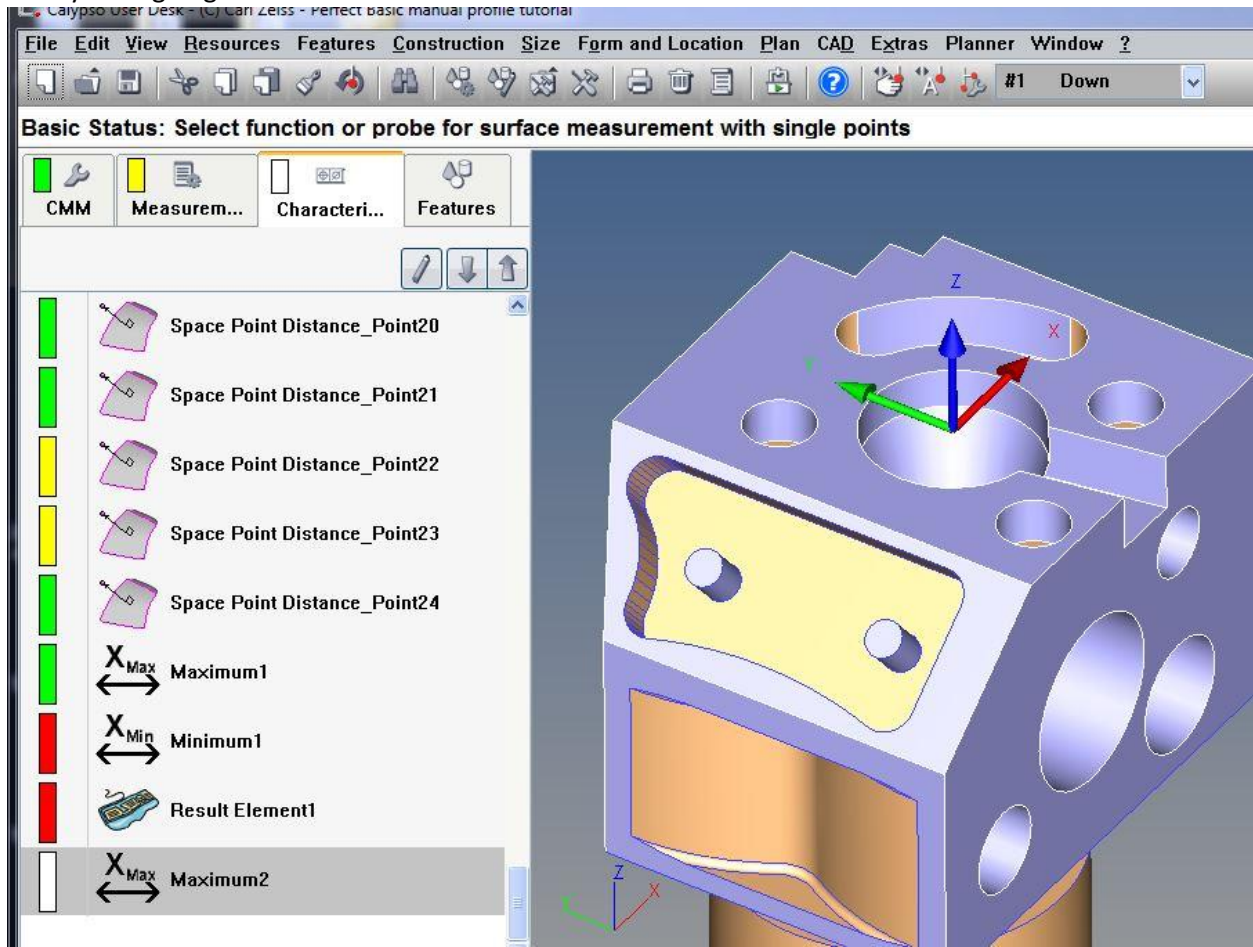
Right Click here and select formula



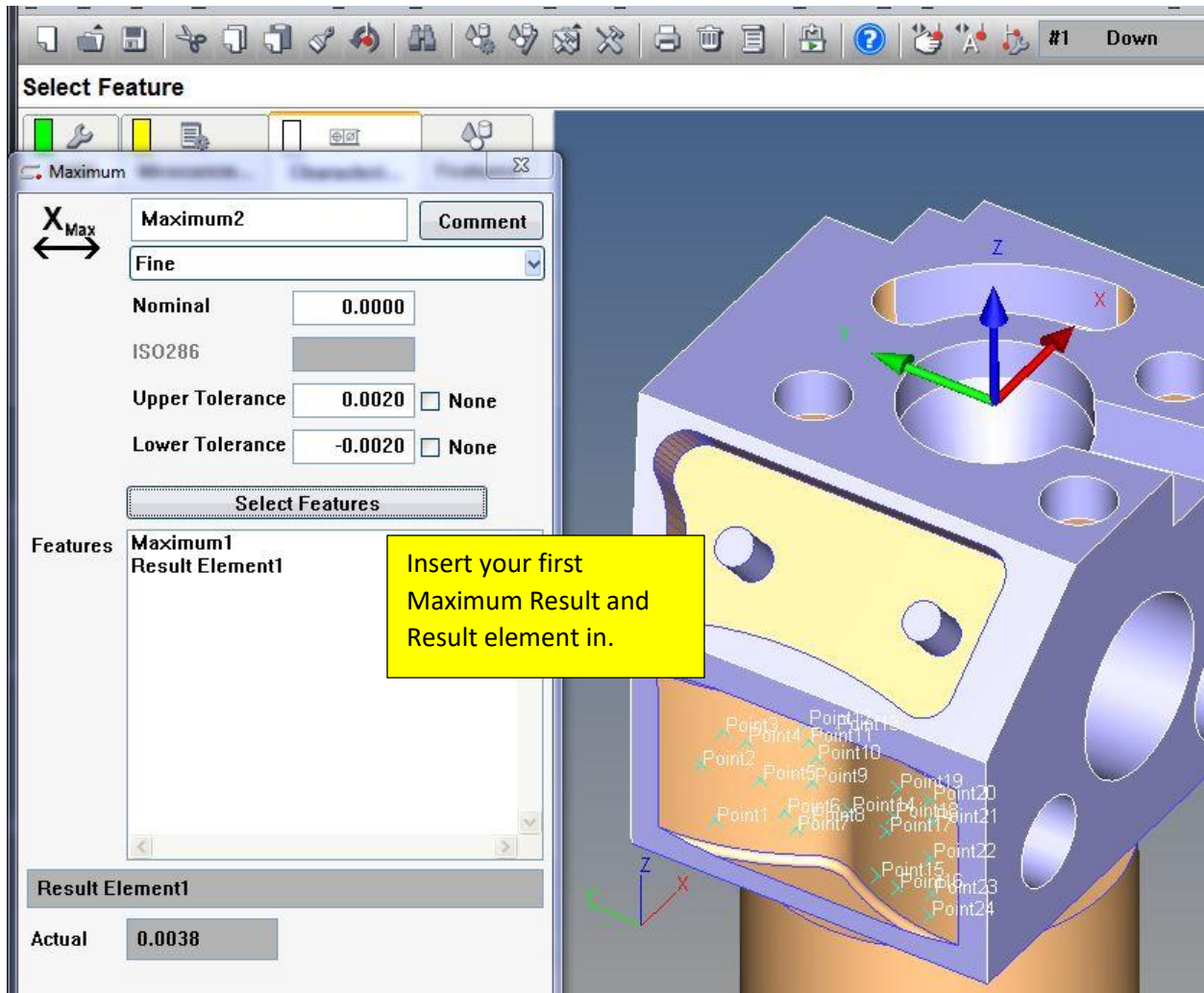
Take out spaces and add abs before string and brackets.

Double click here to see formula

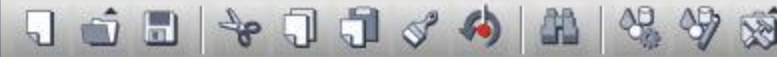
Now you're going back to "Size" "More" "Maximum Result" and make another one.








Now finally do a final Result element containing your second Maximum Result and multiply it by two. Now you have the formula for your profile with space points. In this result element you can add your profile and tolerances.



### Select Feature



Result Element Close



Nominal

ISO286

Upper Tolerance   None

Lower Tolerance   None

Dimension

Length  Angle  Number

Calculate Formula

Formula

Result Input

Dialog Text

Actual

### Select Feature

Result Element

Result Element2  Comment

Fine

Nominal

ISO286

Upper Tolerance   None

Lower Tolerance   None

Dimension

Length  Angle  Number

Calculate Formula

Formula

Result Input

Dialog Text

Actual

